

**CLAIMS**

1. A multi-band inductive circuit in an integrated circuit, forming a dipole and comprising at least two parallel branches respectively comprising a first inductance and a second inductance in series with a capacitor, the two inductances being coupled to  
5 each other.

2. The inductive element of claim 1, wherein n parallel branches each comprise an inductance, n-1 of these branches further comprising a series capacitor, to form an inductive elements with n bands.  
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3. The inductive element of claim 1, wherein the inductances are formed by superposed planar conductive windings.

4. The inductive element of any of claim 1, wherein the value of the first  
15 inductance is selected to approximately correspond to a first cut-off frequency or to the central frequency of a first impedance matching band, desired for the inductive element.

5. The inductive element of claim 4, wherein the value of the second inductance is selected to approximately correspond to a value such that the equivalent  
20 inductance of the two elements in parallel corresponds to the value desired for a second cut-off frequency or for the central frequency of a second impedance matching band of the inductive element.

6. The inductive element of claim 4, wherein the value of the capacitor is  
25 selected according to a resonance frequency desired for the inductive element.

7. The inductive element of claim 6, wherein the capacitor is variable, to form a programmable filter.

8. A multi-band impedance matching circuit, comprising the inductive  
30 element of any of claim 1, and at least one capacitor and/or inductance.

9. A multi-band resonator, comprising the inductive element of any of claim 1 connected between a first electrode of a capacitor having its second electrode connected to a transmit line and the ground.

- 5 10. A multi-band radiofrequency transceiver chain, comprising impedance matching elements of claim 8.